

## REMARKS/ARGUMENTS

In the Office Action mailed October 9, 2007, claims 1-12 were rejected. Additionally, drawings 1-5 were objected to. In response, Applicant hereby requests reconsideration of the application in view of the amended claims and the below-provided remarks. No claims are canceled or added.

For reference, claims 1 and 8 are each amended to clarify the reference to the antenna structure. These amendments are supported, for example, by the subject matter described at page 5, lines 1-19, of the specification.

### Objections to the Drawings

The drawings are objected to because Figures 1-5 are not labeled with descriptive legends. The Office Action refers to 37 C.F.R. 1.84(o) for support of this objection. However, this rule merely states that legends may be used. Alternatively, the Examiner may require that a legend be used where necessary for understanding the drawing. Here, Applicant respectfully submits that a legend is not necessary to understand the content of the drawings because the drawings include reference characters, which are identified in the specification to describe the corresponding components. Since the elements shown in the drawings are identified by reference characters and described in the specification, it is unclear from the explanation in the Office Action how a legend might provide further understanding of the subject matter of the drawings. Nevertheless, if the Examiner determines that a legend is necessary for understanding of the subject matter of the drawings, then Applicant respectfully requests that the Examiner indicate specific drawings or portions of the drawings for which a legend might be necessary.

Alternatively, in the absence of an explanation to indicate why a legend might be necessary for understanding the drawings, the cited rule does not apply. Accordingly, since the Office Action does not explain why a legend might be necessary for understanding the drawings, Applicant respectfully asserts that a legend is not necessary for understanding the drawings and requests that the objections to the drawings be withdrawn.

#### Claim Rejections under 35 U.S.C. 102 and 103

Claims 1-5 and 8-11 were rejected under 35 U.S.C. 102(e) as being anticipated by Phillips et al. (U.S. Pat. No. 4,672,685, hereinafter Phillips). Additionally, claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Boyle (U.S. Pat. No. 6,624,788, hereinafter Boyle). Additionally, claims 7 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Ella (U.S. Pat. No. 6,278,342, hereinafter Ella). However, Applicant respectfully submits that these claims are patentable over Phillips, Boyle, and Ella for the reasons provided below.

As a preliminary matter, it appears that the Office Action cites Phillips as prior art under 35 U.S.C. 102(e); however, the Office Action quotes 35 U.S.C. 102(b), and Phillips does not appear to be prior art under section 102(e). Accordingly, applicant respectfully requests that the Examiner clarify whether the rejection of the indicated claims based on Phillips relies on section 102(e) or 102(b).

#### Independent Claim 1

Claim 1 recites “the signal propagating means comprises a single radiating antenna structure having sufficient bandwidth to cover the larger one of the transmitting and receiving frequency bands” (emphasis added).

In contrast, Phillips does not disclose a single radiating antenna structure. Phillips merely discloses an antenna with multiple radiating elements. Phillips, col. 2, lines 41-43. In particular, Phillips discloses two rods which form radiating portions of the antenna structure. Phillips, col. 2, line 68, through col. 3, line 1. In other words, although Phillips refers to a single antenna structure, generally, the antenna structure includes two separate radiating elements. Furthermore, although Phillips describes a serpentine pattern on a printed circuit board and which cooperates with the ground plane to form a transmission line to connect the radiating elements, Phillips does not describe the serpentine pattern as a part of the radiating elements. Hence, the rods are two separate and distinct radiating elements because the rods are separated by the serpentine pattern on the printed circuit board.

Therefore, Phillips does not disclose all of the limitations of the claim because Phillips does not disclose a single radiating antenna structure. Accordingly, Applicant

respectfully submits claim 1 is patentable over the cited reference because Phillips does not disclose all of the limitations of the claim.

#### Independent Claim 8

Applicant respectfully asserts independent claim 8 is patentable over Phillips at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 8 recites “signal propagating means including a single radiating antenna structure having sufficient bandwidth to cover the larger one of the transmitting and receiving frequency bands” (emphasis added).

Here, although the language of claim 25 differs from the language of claim 1, and the scope of claim 8 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 8. Accordingly, Applicant respectfully asserts claim 8 is patentable over Phillips because Phillips does not disclose a single radiating antenna structure.

#### Dependent Claims

Claims 2-7 and 9-12 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 8. Applicant respectfully asserts claims 2-7 and 9-12 are allowable based on allowable base claims. Additionally, each of claims 2-7 and 9-12 may be allowable for further reasons, as described below.

In regard to claims 2 and 9, Applicant respectfully submits that claims 2 and 9 are patentable over Phillips because Phillips does not disclose all of the limitations of the claims. Claim 2 recites “the antenna structure comprises a Planar Inverted-F Antenna (PIFA)” (emphasis added). Claim 9 recites a similar limitation. In contrast, Phillips does not disclose a planar inverted-F antenna (PIFA) because Phillips merely describes a serpentine pattern on a printed circuit board. Applicant submits that a PIFA is a particular type of antenna structure with a particular physical configuration. The radiating elements, either alone or in combination with the serpentine pattern which connects the radiating elements, do not have the physical configuration of a PIFA. Moreover, the fact that the serpentine pattern is on a printed circuit board is insufficient

to establish that the serpentine pattern might be a PIFA. Therefore, Phillips does not disclose all of the limitations of the indicated claims because Phillips does not disclose a PIFA, as recited in the claims. Accordingly, Applicant respectfully submits claims 2 and 9 are patentable over Phillips because Phillips does not disclose all of the limitations of the claims.

### CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the amendment and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-3444** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-3444** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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